EPA Technical Meetings: Action Item Summary – REVISED FOR PREFERRED ALTERNATIVE 4A

Compilation from meetings held with technical staff on Nov 10, 13, and 24 of 2014, and Jan 12, 2015. Meetings included staff from EPA, DWR, USBR, NMFS, USFWS, and ICF.

Meeting #1: November 10, 2014

- ICF will complete an analysis of downstream (including San Francisco Bay) effects including sediment loads and tidal impacts for addition to BDCP Section 5.3, Ecosystems and Landscapes. ICF will include similar information in the SDEIS to capture the ecosystem-level changes.
- EPA thinks all the alternatives should be evaluated against a broad ecosystem indicator so their relative benefits and costs can be discerned. ICF will augment and clarify Section 5.3 to acknowledge X2 as a broad ecosystem indicator, include any relevant ecosystem-level analyses that can be used to describe changes due to BDCP, and discuss habitat contiguity and integrity. EPA asked to review this material before the SDEIS is published.
- o EPA will review the revised Section 5.3 to determine if the analyses address its concerns. ICF will describe any contribution that the BDCP will make toward the overall flow needs of the Bay Delta, and describe the benefits of BDCP and the limits to BDCP's benefits in the context of overall needs, and how this contribution compares to the flow needs of the ecosystem as articulated by scientists.¹ DWR will share this write-up with EPA before publishing the SDEIS.
- ICF will describe the BDCP's relationship to the Clean Water Act and SWRCB's comprehensive update of the Bay Delta WQCP. This includes updating and reconciling the many, varying, descriptions of SWRCB's process in the DEIS for the sake of consistency. DWR will share this write-up with EPA before publishing the SDEIS.
- o ICF will develop text to explain the modeled impacts re: frequency of deadpool conditions that would occur in reservoirs due to climate change assumptions about changes in the timing of precipitation in the absence of changed flood control curves. This will be included in the Supplement and/or Final DEIS.
- Jim Moose (RMM, LLC) is drafting a scope of work for additional discussion of the uncertainties associated with the no action alternative (NAA). This discussion may be a stand-alone section or an integrated part of the SDEIS. The Final EIS will include a "master response" concerning operational changes to the CVP.
- Reclamation will identify Preferred Alternative.
- For each impact statement, include a CEQA and NEPA conclusion.

Dibble, C. and Water Branch. Quantifiable Biological Objectives and Flow Criteria for Aquatic and Terrestrial Species of Concern Dependent on the Delta. California Department of Fish and Game; 11/23/2010.

Final Draft Restoration Plan for the Anadromous Fish Restoration Program: A Plan to Increase Natural Production of Anadromous Fish in the Central Valley of California; http://www.fws.gov/stockton/afrp/rationale.cfm

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¹ Development of Flow Criteria for the Sacramento-San Joaquin Delta Ecosystem Prepared Pursuant to the Sacramento-San Joaquin Delta Reform Act of 2009, (2010 Flows Report), available at

http://www.waterboards.ca.gov/waterrights/water_issues/programs/bay_delta/deltaflow/docs/final_rpt080310.pdf

- o DWR/ICF will clarify what methods were used to reach conclusions.
- o DWR/ICF will add text to Chapter 11 (methods) to clearly describe the decision process that was used to reach conclusions (same as for Topic 3). EPA requests reviewing this section before it is published in the SDEIS.
- o EPA (Paul Jones) will review handout provided by David Zippin.
- DWR/ICF will clarify the effects determinations for the beneficial uses that will be affected by the proposed project
- O DWR/ICF will add the following to the SDEIS:
 - o greater detail about the process for designing 'state of the art' fish screens and the current assumptions pertaining to design (mesh size, sweeping and approach velocities, etc.); and

Meeting #2: November 13, 2014

- DWR/ICF will share results of ELT WQ modeling with EPA when they are available.
- DWR/ICF will clarify in the SDEIS the relationship between the BDCP and the Bay Delta WQCP, and will reconcile conflicting descriptions of the project and the process, respectively, in various chapters of the SDEIS.
- The flow-related questions in Table 3 of D-1641 were discussed previously. EPA will review the administrative draft RDEIR/SDEIS and provide comments.

Meeting #3: November 24, 2014

- Regarding selenium (SDEIS):
 - Provide context for current contaminant sources, potentially increased residence times in the estuary, and associated processes.
 - Work with USFWS to describe the impacts of potential increased risk of exposure for each sensitive fish species to increased concentrations of selenium related to implementation of BDCP (similar to green sturgeon language in the Public Draft).
 - Conduct updated water column modeling (including downstream effects), and review literature.
 - Consider revisiting policy decision regarding in-Delta results and downstream effects to characterize impact conclusions in the DEIS.
 - Better integrate/cross-reference Chapters 8 and 11 of DEIS, including linkage between water quality modeling results and biological effects for each covered species.
 - Determine appropriate place in Chapters 11 and 12 to call out CM1-related impacts specific to contaminants.
 - Determine potential for cumulative impacts associated with San Pablo Bay refineries and interactions with BDCP-related San Joaquin River flows.
 - o In the Supplemental or Final EIS, revise text based on potential updates from EPA

regarding expected changes in water quality standards, including potential splittail bioaccumulation modeling.

- Regarding **mercury** (SDEIS): The following action items will be addressed in the context of a performance standard for restoration.
 - Add context of Yolo Bypass risks for CM2 and work with USFWS to describe how changes in mercury concentrations related to implementation of the BDCP will affect each covered species.
 - o Describe ongoing DWR modeling and study efforts (in the Final EIS).
 - Revise CM12 into two groups: one addressing floodplain concerns and one addressing tidal habitat issues; confirm that CM12 is a menu of options, and potentially add options based on DWR efforts.
 - Add to CM4 design criteria for restoring wetlands to achieve multiple goals such as reversal of subsidence, sequestration of carbon and mercury, levee stabilization, and maintaining channel geometry and tidal energy so that X2 (low salinity zone) can be managed to increase the abundance and survival of resident fishes.
 - Describe appropriate uses of clean dredged material within the Delta, and discuss its potential to exacerbate subsidence on peat-based soils.
 - o Potential policy decision regarding impact conclusions (EIS).
 - o Commitment to consider historical ecology in design and latest ecological principles.
- DWR/ICF will explain the logic chain in the SDEIS for reaching conclusions in Ch. 11 (applies to selenium and mercury, and more broadly to other issues).
- DWR/ICF will outline methods used to estimate potential temperature impacts and add a rationale for not using daily models;
- EPA will have an offline conversation with NMFS (Cathy M.) regarding the use of EPA's Water Temperature Guidance for salmon.²
- DWR/ICF will add an explanation in Chapter 5 and Appendix 5A that UWMPs have been reviewed, and are consistent with the assumptions used in BDCP modeling (full use of contract amounts) and with 20 x 2020 standards.
- EPA will review Attachment D5 to Appendix 5A (sensitivity analyses relating to habitat footprints) and potentially the Suisun Marsh Plan, and will report if additional discussion is needed.

Meeting #4: January 12, 2015

- As identified in Technical Meetings 1-3, ICF is working on several action items that will improve the 'logic chain' between analyses and conclusions.
- o ICF will review description of operations in documents and provide additional detail.
- o DWR will provide a response to EPA regarding the USACE permit.
- o DWR will have CH2 contact EPA to discuss application of E/I ratio in BDCP modeling.

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EPA Note: Some of these notes refer to "agreements" or "conclusions." At this point, EPA is responding to tentative proposals for revisions suggested by the lead agencies or its consultants. Any agreements or conclusions referenced in this document are similarly tentative. EPA will base its Section 309 review on the actual released contents of the public revised DEIS and/or supplemental DEIS (whichever approach is taken).